ADDRESSING WELL-BEING IN EARLY AND MIDDLE CHILDHOOD: RECREATION THERAPY INTERVENTIONS AIMED TO DEVELOP SKILLS THAT CREATE A HEALTHY LIFE

by

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STATEMENT OF THESIS APPROVAL

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ABSTRACT

Children who experience increased levels of stress in early and middle childhood are at higher risk for symptoms of depression and anxiety, resulting in an impaired health-related quality of life (HRQoL). When a child experiences trauma or toxic stress, the amygdala experiences hypertrophy. Thus, the child's enlarged amygdala undergoes changes in the architecture of the developing brain. This change in the brain's structure, results in a hyperresponsive physiologic stress response and increased potential for fear and anxiety.

Though the changes in the brain are not visible, toxic stress can result in permanent changes in both the structure and function of the brain. Consequently, there is a link between toxic stress in early and middle childhood, and mental health in adult life. This knowledge has developed the need for a strong presence in understanding preventative mental health care for children.

An effective method of providing these interventions is Recreation Therapy (RT). RT is the purposeful use of leisure and recreation as a means to maximize an individual's overall optimal health, well-being, and quality of life. RT functions from a strength-based approach though the Leisure and Well Being Model (LWM) of service delivery. A psychoeducational program entitled Healthy Me! was developed using both the LWM in conjunction with the Utah State Core Curriculum Health Education Standards. The

present study investigated the impact that Healthy Me! had on 110 students ages 9-10 in the 4th grade.

Each of the 110 students completed the Pediatric Quality of Life Inventory 4.0 likert-type scale to gather pre and post data, which indicated the impact of the progress. The results of the data were calculated using a series of *t*-tests in order to test the hypotheses. Findings suggest that the program proved effective in mitigating a decrease in HRQoL.

Evidence supports RT interventions being administered in a school-based setting aimed to address HRQoL, which prevents a decline of HRQoL in early and middle childhood. It also provides a framework for future research to be administered in order to increase the validity of the impact of addressing mental health concerns in early and middle childhood.

To my sweet mother, who taught me how to work hard, love endlessly, and serve others.

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CHAPTER I

INTRODUCTION

The World Health Organization (WHO) defines health as, "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1948). In order to attain and maintain health across the lifespan, emerging evidence suggests that early and middle childhood development stages set the foundation for healthy development (Eccles, 1999). These developmental stages are important for an individual's health-related quality of life (HRQoL). Although quality of life can be subjective, the Centers for Disease Control and Prevention (CDC) have defined HRQoL as encompassing an individual holistically, meaning well-being in each domain of health (CDC, 2010).

Foundationally, human development is defined by three separate but overlapping, overarching concepts that psychologists refer to as the biological, cognitive, and psychosocial domains (Allen & Marotz, 1989; Bransford, Brown, & Cocking, 1999). Each of these domains can be further categorized into the physical, social, emotional, cognitive, and spiritual domains. Understanding each domain of health is foundational to distinguishing an individual's HRQoL. How a child develops each of the five domains during developmentally sensitive stages is likely to determine his or her HRQoL across

the lifespan (Crain, 2000).

Child development theorists such as Jean Piaget, Lawrence Kohlberg, and B. F. Skinner recognized the importance of the developmental milestones during the early and middle childhood stages. Early childhood (generally defined as birth to 6) is a time of physical, cognitive, and socio-emotional development (Allen & Marotz, 1989). Middle childhood (generally defined as ages 6 to 12) is a time when children develop skills for building healthy social relationships and learn roles that will be foundational in healthy development (Erikson, 1963). The early and middle childhood stages are foundational for developing each domain of health; this can be done by acquiring and implementing skills that create and support HRQoL (Halfon, 2009).

An important aspect of HRQoL is an individual's mental health. Mental health is not constrained to factors that lie within the emotional domain, but can be affected by any or all of the five domains. WHO explains mental health as "a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community" (WHO, 2001). Research suggests that early childhood adversity and toxic stress can create lifelong effects to mental health (Schore, 1999). Biological and architectural changes to the brain can develop if a child experiences trauma or toxic stress in early to middle childhood, given that he or she does not understand how to deal with such events. When a child experiences trauma or toxic stress, the amygdala, or the portion of the brain that is responsible for emotional regulation, experiences what is called hypertrophy. Hypertrophy is the process in which the organ or tissue becomes enlarged due to an increase in the size of the cells within that particular region

(Medilexicon, 2013). Thus, the child's enlarged amygdala undergoes neuroplasticity, or changes in the architecture of the developing brain. This change in the brain's structure results in a "hyperresponsive or chronically activated physiologic stress response, and increased potential for fear and anxiety (as cited by Shonkoff et al. 2012, p. 234)."

Though the changes in the brain are not visible, toxic stress can result in permanent changes in both the structure and function of the brain. These changes generate more reactive behaviors in children and a diminished ability to cope with stress (Shonkoff et al. 2012). After an individual's amygdala has experienced hypertrophy, his or her ability to handle stress becomes a biological and mental health concern for the rest of his or her life. Consequently, there is a link between toxic stress in early and middle childhood, and mental health in adult life. This knowledge has developed the need for a strong presence in understanding preventative mental health care for children.

Growing recognition exists for prevention and health promotion tactics as a means of addressing mental health during these developmentally sensitive periods. These periods are when prevention, early intervention, and health promotion can produce the maximum benefits. The overwhelming statistics indicate that mental health is the leading cause of disability worldwide (WHO, 2001). Therefore, it is critical to examine interventions to educate and support children in developing skills and strategies that create a healthy life, as a means of improving mental health and ultimately the overall HRQoL.

An effective method of providing interventions to support the development of skills that create a healthy life is Recreation Therapy (RT). RT is the purposeful use of leisure and recreation as a means to maximize an individual's overall optimal health,

well-being, and quality of life (Robertson & Long, 2008). The clinical practice of RT is facilitated through a systematic process that involves assessment, planning, implementation, evaluation, and documentation (Stumbo, 2008). The overall aim of RT is to generate outcomes for the individual participating in RT service. Outcomes are direct effects of service or observable changes that result from any given intervention (Hodges & Luken, 2000; Stumbo, 2011).

RT focuses on those important, valued life domains and works from a holistic approach, assessing and addressing the physical, social, emotional, cognitive, and spiritual domains of health. Hence, the RT profession has the opportunity to play an important role in increasing an individual's HRQoL. At its core, RT is a strength-based approach in which the main purpose is to assist individuals in reaching their goals and aspirations (Anderson & Heyne, 2012). The goal of RT is to build positive emotion and action in participants that empowers them to take on opportunities and challenges within important, valued life domains (Carruthers & Hood, 2007). Through the RT process, qualified RT professionals work to support participants in building strengths as they develop a meaningful life. In spite of challenges and limitations that may occur, in turn, the participant will likely increase his or her HRQoL (Carruthers & Hood, 2007).

RT functions from a strength-based approach though the Leisure and Well Being Model (LWM) of service delivery. The LWM is based in literature from the psychology, social work, and human development fields, including components of strength-based practice, well-being, and leisure theory (Carruthers & Hood, 2007). The premise of the model relies on working from a strengths-based approach to generate positive emotion and build resources, recognizing the significant role that leisure has in facilitating these

experiences and producing well-being. Carruthers and Hood (2007) indicate that the LWM provides empirical and theoretical backing for the RT profession to embrace well-being as a desired outcome for RT interventions. The LWM implies that RT is an ideal profession to facilitate experiences that develop the skills needed to create a healthy life.

In order for children to acquire skills that create a healthy life, they should receive information from a variety of settings. However, school-based settings are an optimal environment for the development of these skills. The Utah Board of Education curriculum guidelines have identified and established the need for the development and care for each individual's mental health. The first standard in the health curriculum as outlined by the Core Standards for Utah public schools states, "The students will learn ways to improve mental health and manage stress" (Core Binder, 2013, p. 117). The missing component in the curriculum is the experiential practice and real-world application that RT can provide. If the ill effects of toxic stress are likely to create lifelong illness, then the development of skills to create a healthy life will assist children in managing toxic stress, which will likely generate higher HRQoL across the lifespan. Thus, using RT as an inclusive intervention in a school-based setting will likely provide the support needed for children to develop the skills necessary in creating a healthy life.

Mental health has an impact on overall HRQoL. Consequently, it is imperative that greater effort and importance are placed on the development of skills that create a healthy life within the health curriculum of schools across the nation. Increasing these skills in early and middle childhood can promote an optimal HRQoL, which is likely to prevent the adverse health impact of toxic stress across the lifespan. Therefore, the purpose of this study is to determine if an RT intervention within a school-based setting,

focused on the personal implementation of skills that create a healthy life, will result in an increased HRQoL.

CHAPTER II

LITERATURE REVIEW

Introduction

According to the Centers for Medicare and Medicaid (CMS), U.S. health care spending reached $2.7 trillion, or $8,680 per person in 2011. With recent political developments, states are encouraged to undergo a reconstruction of the concept of health care. The focus of health care is moving from producing a temporary solution, to embarking on a lifestyle of health prevention and promotion, more fully capitalizing on the World Health Organization's (WHO) definition of health, which states: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1948). This definition addresses an individual holistically from a strength-based approach, not merely looking at the absence of disease, but at overall well-being.

The concept of well-being has been thoroughly investigated by researchers, philosophers, and practical thinkers. Well-being is often used interchangeably with happiness, health, and quality of life (Anderson & Heyne, 2011). This interchangeability suggests that well-being is conceptually nebulous and difficult to define, regardless of the approach. Pollard and Rosenberg (2003) defined well-being as "a state of successful, satisfying, and productive engagement with one's life and the realization of one's full

physical, cognitive, and social-emotional potential" (as cited by Carruthers & Hood, 2007 p. 18). This is the fundamental definition of well-being that will be used to guide this research.

Aristotle discussed the ecological perspective of well-being arguing that the community must be in place to foster well-being, just as much as the individual (Kraut et al., 2002). Additionally, more contemporary philosophers suggest that well-being involves an internal as well as an external approach to the good life, well-being, and human dignity, which are interrelated themselves (Nussbaum & Sen, 1993). This three-prong approach is supported by ideas that have been identified as foundational for well-being including the following: acceptance of self; positive relationships; autonomy and self-determination; environmental competence; purpose in life; and personal growth (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000). Carruthers and Hood (2007) indicate that these ideas provide an individual with the opportunity to live in a state of well-being or "…successful, satisfying, and productive engagement with one's life and the realization of one's full potential" (p. 18).

Significantly related to well-being is the concept of health-related quality of life (HRQoL). Although the term quality of life is often used interchangeably with well-being, quality of life has been defined and used in a variety of disciplines. HRQoL is a term that the medical-related fields use to narrow their focus and encompasses aspects of overall quality of life that clearly demonstrate an impact on health. This multidimensional concept includes domains related to the physical, mental, emotional, and social aspects of health (Healthypeople.gov, 2014).

In addressing HRQoL, practitioners go beyond the direct measures of health to

focus on quality of life. This includes an individual's beliefs, perceptions, and expectations, which are likely to demonstrate a more accurate measurement of well-being (Testa & Simonson, 1996). While objective measures are examined, an individual's perception of his or her own health is more heavily investigated. This allows for the individual to identify the internal and external factors that, they believe, play a role in altering overall well-being. Research suggests that these types of self-assessed health statuses are proven to be more powerful predictors of morbidity and mortality than objective measures (DeSalvo, Bloser, Reynolds, He, & Munter, 2006). An individual's perception of quality of life is likely to impact his or her overall well-being. With quality of life being a fundamental focus of our national public health agenda (healthypeople.gov, 2014), it is essential that we consider and investigate the impact that HRQol has on an individual's overall well-being.

Early and Middle Childhood

HRQoL and well-being are multidimensional concepts that have their roots deeply embedded in early and middle childhood. Examining these concepts in relation to the theories of human development will likely provide information that is key to embarking on a lifelong process of attaining overall well-being. Human development literature suggests that there are three overarching domains of an individual: the biological, the cognitive, and the psychosocial domains (Allen & Marotz, 1989; Bransford, Brown, & Cocking, 1999). These three domains have been studied for years, as theorists have provided information on the developing individual (Erikson, 1976; Freud 1910, 1930; Piaget, 1953). Although theorists differ with the specifics, they

provide a general understanding of growth and development. For example, Piaget and Freud identified foundational information in regards to human development, yet they deemed middle childhood as a period in which development plateaued. However, when Erikson proposed the eight stages of development, he noted the importance of middle childhood as a time of social development that largely impacts human functioning across the lifespan (Crain, 2000).

Erikson's ideas as well as emerging evidence identify early and middle childhood stages critical for healthy human development (Eccless, 1999). Early childhood is usually defined as approximately birth to 6 years of age (Allen & Marotz, 1989), and is a stage of ample growth across the three developmental domains. One example of this growth as evidenced by research identifies that during early childhood, a child's brain grows to 90% of its adult capacity, resulting in structural sensitivity (Purves, 1994). This rapid physical development is accompanied by cognitive development, which, according to Erikson, is focused on independence. Additionally he posits that developmental milestones in early childhood consist of emotional regulation, attachment, language development, and motor skills (Erikson, 1963). These milestones are likely to lay the foundation for determining HRQoL across the lifespan.

Further, middle childhood is typically defined approximately as 6 to 12 years of age and is critical for cognitive development and attaching meaning to words (Erikson, 1963). Human development literature and theorists suggest that around age 6, a cognitive change occurs. This change allows for children to develop key conceptual or thinking skills, which are foundational and continue to be built upon throughout middle childhood and into adolescence (Eccless, 1999). Erikson identified that an important event during

this stage is school attendance. Due to the cognitive and physical development that has occurred, children in this stage are now prepared to thrive in the school setting. Further, children in this stage are prepared to engage socially with their peers, which is an important factor in attaining HRQoL.

This is an indication that more than any other developmental stages, early and middle childhood construct the foundation for health literacy, self-discipline, decision making, eating habits, and conflict resolution (Eccless, 1999). Evidence suggests that these experiences in early and middle childhood are essential for a child's healthy development. The way a child develops during this time affects future cognitive, social, emotional, and physical development, which impacts school readiness and future success in life (Halfon, 2009). Therefore, it is important to develop skills and facilitate experiences that are important for acquiring and sustaining HRQoL across the lifespan.

Mental Health

One important facet of HRQoL and healthy development in early and middle childhood is mental health. In its definition of health, WHO identifies mental health as one of the three fundamental components in its holistic approach. Well-being in the mental health aspect is imperative for achieving HRQoL and overall well-being. A deficit in the mental health domain has an impact on well-being in both of the supplementary components of health. Mental health allows individuals to "realize their potential, cope with the normal stressors of life, work productively, and contribute to their communities" (WHO, 2014). Evidence suggests that over half of mental illness diagnoses having their beginnings before the age of 14 (WHO, 2013). These data suggest the need for strategic

preventative mental health measures to be implemented in order to support HRQoL. These measures should ideally be implemented in early and middle childhood, which have been identified as developmentally sensitive stages of life (Shonkoff, Andrew & Garner, 2012).

Strategic interventions are likely to provide the information and development of skills necessary to support a child's environment and genetic pathways throughout the critical development stages. Bea Van Den Bergh (2011) identifies this relationship of nature versus nurture by stating: "Development is an active process that occurs as a function of the continuous dialogue between the individual and its environment" (p. 19). Recent research suggests that the environment, or external factors, influence overall health, specifically mental health. Looking beyond the predisposition of mental illness, modern research has investigated the impact that both physical and social ecology have on mental health across the lifespan (Schore, 1999; Van Den Bergh, 2011). This research indicates there are lifelong effects due to early childhood adversity and toxic stress. The impact that stress has on a developing mind designates a high correlation with mental illness across the lifespan. Several adult health and medical conditions point to pre-disease pathways that have their origins in early and middle childhood (Schore, 1999).

Although genetic variability has a definite role in stress responses, environmental influences have a considerable impact, and can happen as early as fetal development (Brand, Engel, Canfield, & Yehuda, 2006; Oberlander et al., 2008). The biology of stress involves the process of activating the neural circuits that control neuroendocrine response. This activation is due to an external or ecological trigger that activates the hypothalamic-pituitary-adrenal axis causing it to release stress hormones (Szyf, 2009).

While this reaction occurs, other responses of the para-sympathetic nervous system are ensuing, including hypertrophy of the amygdala. Hypertrophy is the process in which the organ or tissue becomes inflamed due to an increase in the size of the cells within that specific region (Medilexicon, 2013). These responses in the brain typically serve as a protective factor of the human body. However, if stress occurs frequently or goes for a prolonged time unmanaged, it is likely to damage or wear down the structure of the brain (Shonkoff et al., 2012).

When a child who lacks appropriate support experiences hypertrophy, the child's enlarged amygdala undergoes neuroplasticity, or changes in the architecture of the developing brain. This alteration of the brain's structure results in a hyper-responsive stress response, and increased potential for fear and anxiety (Loman & Gunnar, 2010). In the developing brain, the amygdala, which is responsible for emotional regulation, overproduces neural connections to work to protect against the stress response, making it difficult for other portions of the brain to produce the needed neural connections (Dayas, Buller & Day, 1999). This overproduction of neural connections creates a hyper-responsive stress response making a child appear more reactive and less able to handle the stressors he or she encounters.

There are three types of stress responses as outlined by the National Scientific Council on the Developing Child (2011); these include positive, tolerable, and toxic. A positive stress response is that which would be considered normal responses to daily stressors and is short lived. This can include an increased heart rate and the release of appropriate hormone levels. Learning to manage these positive stress responses is considered to be normal healthy development (Gunnar & Cheatham, 2003; National

Scientific Council on the Developing Child, 2011). Tolerable stress responses are considered to have the potential to have a negative impact on or alter the structure of the brain. This response occurs over limited time and presents when the magnitude of stress is beyond the normal stressor of life. The risk of physiologic damage increases with tolerable stress responses, especially in the absence of healthy life skills and supportive relationships (Shonkoff et al., 2012). Finally, the toxic stress response refers to prolonged and lasting stress response. This means that the amygdala remains in its hypertrophic state for long periods of time, resulting in permanent architectural damage to the developing brain (National Scientific Council on the Developing Child, 2011).

Though changes in the brain's architecture are not outwardly visible, they are likely to impact the child's ability to regulate emotion. This often makes a child appear more reactive, even in mildly stressful situations (Shonkoff et al., 2012). Due to its permanency, stress responses that alter the architecture of the brain have lasting affects and are noted to increase the likelihood of anxiety and depression across the lifespan (Anda et al., 2006; Poulton et al., 2002). Research suggests that mental well-being can be achieved when health promotion tactics are implemented in early and middle childhood, where mental health has its origins (Loman, Gunnar, 2010; McEwen, 2008; National Scientific Council on the Developing Child, 2011; Shonkoff et al., 2012).

To investigate and address the origins of adult disease in early and middle childhood is critical for the movement from a deficits approach to a strength-based approach of health care. Research indicates that the time has come to increase the common knowledge of brain development and its relation to the early childhood origins of adult disease. This research indicates that there are compelling implications for

prevention focused interventions implemented to increase healthy life skills which will likely result in mental well-being (Shonkoff et al. 2011). Thus, skills that create a healthy life promote well-being and increase the capacity for HRQoL.

Skills that Create a Healthy Life

Investments in interventions that teach skills to create a healthy life will reduce adversity caused by stress and strengthen the foundation for mental well-being, generating a large return for society (National Scientific Council on the Developing Child, 2011). Thus, the need arises for the development of a program that will encourage and empower children to develop healthy life skills. These skills are foundational in understanding and coping with stress and adverse experiences. Doing so will allow the amygdala to regulate emotions properly, reducing the length of time that the amygdala experiences hypertrophy. Interventions focusing on these foundational concepts will create a framework to promote healthy childhood development that inspires overall well-being and a productive and sustainable future (McEwen, 2008; Shonkoff et al. 2011).

Recreation Therapy

An effective method for implementing interventions focused on skills that create a healthy life is through the practice of Recreation Therapy (RT). The RT profession sometimes referred to as Therapeutic Recreation, through psychoeducational interventions, use play, recreation, and leisure interventions to bring about well-being for an individual. Martha Nussbaum, an American philosopher, examines the concept of overall well-being and suggests 10 capabilities that must be present for well-being. One

critical capability that is presented is play, which is identified as, "being able to enjoy recreational activities, to laugh, and to play" (Nussbaum, 2006). This capability suggests that RT has a fundamental role in facilitating the development and implementation of skills that create a healthy life, resulting in mental well-being and HRQoL.

The practice of RT is defined by the American Therapeutic Recreation Association (ATRA), and indicates that the purpose of RT services are to provide resources and opportunities aimed to improve health, well-being, and quality of life (ATRA, 2009). RT is facilitated by professionals who are qualified, as outlined by state licensure and national certification regulations (ATRA, 1986). Professionals strive to implement evidence-based practice in effort to attain the ultimate goal of well-being and HRQoL.

The core values of RT allow for the profession to function from a strength-based approach while working to generate HRQoL. Anderson and Heyne (2012) provide the following definition, which more adequately addresses the nature of RT from the strength-based approach in which constructs this research:

> RT is the purposeful and careful facilitation of quality leisure experiences and the development of personal and environmental strengths, which lead to greater well-being for people who, due to illness, disability, or other life circumstances, need individualized assistance to achieve their goals and dreams. (p. 39)

Additional examination of this definition identifies that RT provides *purposeful* and *careful* facilitation of services. Qualified professionals approach each intervention through a systematic process that creates the best possible leisure experience. The aim of this process is to provide individualized services, capitalizing on his or her strengths in order to meet the goal of each individual.

This approach varies drastically from the traditional medical model that has informed practice from its beginning. The medical model's focal point works from a deficit approach to treatment and care, meaning that practitioners address deficits in effort to fix problems. Contrary to this deficit approach, a strength-based approach moves from a focus on deficits to a focus on strengths. This approach inspires positive change through working with strengths, goals, and aspirations, rather than problems.

RT, at a foundational level, is adequately designed to address an individual's needs and meet his or her goals. This design empowers the individual to increase his or her well-being and conjointly his or her HRQoL. RT is distinguished from other disciplines by its incorporation of play, leisure, and recreation into practice. The range of skills and the body of knowledge that RT can provide allow for purposeful and careful implementation of interventions. These services are delivered through a systematic process that creates an optimal approach to assisting individuals in achieving well-being through the development of healthy life skills (Anderson & Heyne, 2012).

The concepts well-being and HRQoL are core concepts that help drive the RT profession. Qualified professionals work to empower the individuals with whom they work, to increase their quality of life by generating an improved sense of overall well-being. The aim of RT services is to provide experiences that generate positive outcomes resulting in an increased level of well-being. Outcomes are observable and identifiable changes that result from participation in any given intervention (Shank & Kinney, 1991). The objectives need to be specific, measureable, and meaningful in nature and can be directed to short- or long-term changes (Buettner & Fitzsimmons, 2000; Hodges & Luken, 2000; Stumbo, 2008). Outcomes should produce reliable results intended to

reduce the highly variable patterns and increase best practices within the profession (Scalenghe, 1991). Long-term outcomes that have been identified in RT literature include health, quality of life, resilience, hardiness, and well-being (Austin, 1998; Shank &Coyle, 2002; Van Andel, 1998; Widmer & Ellis, 1998).

With these long-term outcomes in mind, RT functions from a holistic approach. This approach includes assessing and addressing the five domains of an individual to produce outcomes. The domains delineated in the literature from recreation therapy, human development, and the psychology professions are identified as the following: physical, social, cognitive, emotional, and spiritual domains (Anderson & Heyne, 2012; Carter & Van Andel, 2011; National Scientific Council of the Developing Child, 2014; Rice, Smith, & Gayan, 2009). RT's holistic approach sets the stage to function from a strengths-based method to attain individualized goals.

RT Process

In order to work from a holistic approach, professionals must gather data about the individual served through an intricate and detail oriented process. The systematic process that facilitates RT services consists of conducting a valid and reliable assessment; planning (development of goals and objectives and selection of appropriate interventions) based on the information gathered from the assessment; implementation of the prescribed interventions in order to reach the desired outcome; evaluating the outcomes as they relate to the desired goals and objectives; and documenting the individual's response to the intervention plan as well as the analysis of the recreation therapist (Stumbo, 2011). Regardless of the setting or population in which RT services are provided, following the

RT process is required when a practitioner is claiming to provide RT services. This process provides a systematic method to producing the appropriate outcomes due to the fluid nature of each step in the process (Austin, 2008).

Assessment is the collection of critical data that are directly related to the delivery of care and the outcomes of the program or intervention (Riley, 1991; Stumbo, 2011). This step in the process allows RT professionals to determine the client's strengths, goals, and limitations. The assessment is foundational for providing the basis for an individualized treatment plan (ATRA, 2013). Gathering information for the assessment can be done through interview (self-assessment or proxy-report) and observation, and is most valid and reliable when a standardized assessment is used (Burlingame & Blaschko, 2010). After the client's needs are identified, the specialist moves into the planning stage by reviewing the collected data and developing an individualized plan of action. Goals and objectives are generated and the specialist moves forward with determining a strategy to generate outcomes for the goals identified.

Once the strategy has been created, the specialist implements the plan with the individual. Specialists utilize a variety of techniques and processes based in education, teaching, recreation, and leisure to create positive change and generate outcomes (Austin, 2009). The next step in the process is evaluation. This involves reviewing the collected data through the duration of the program to evaluate the progress of the individual receiving services. Evaluation can be normative, summative, or include both approaches depending on the needs of the program. The final step is to document the progress that the individual has toward his or her goals and objectives. This process can be applied in any setting where goal-directed interventions are needed or implemented.

Leisure and Well-Being Model of Service Delivery

The RT process is best facilitated when practitioners utilize a service delivery model. These models accomplish three main objectives: they support professional practice (Bullock, 1998; Carruthers & Hood, 2007; Sylvester, Voelkl, & Ellis, 2001) communicate the credibility of services (Voelkl, Carruthers, & Hawkins, 1997); and guide academic and professional development (Sylvester et al., 2001). Consequently, service delivery models facilitate and advance the profession by systematically guiding education, practice, and research initiatives (Sylvester et al., 2001). A service delivery model provides a graphic representation that outlines essential components necessary to meet the overall intended goal.

A prominent and theoretically supported service delivery model in the RT profession is the Leisure and Well-Being Model (LWM; see Figure 1). Carruthers and Hood (Carruthers & Hood, 2007; Hood & Carruthers, 2007) designed the LWM in an effort to provide a strength-based approach to RT service delivery. The development of this model was inspired by the paradigm shift that has been occurring in the health and human services field. For years, the focus primarily has been on reducing the deficits of an individual (Benson, 1997; Frisch, 2006); however, emerging evidence suggests that taking a strength-based approach to health will likely yield more positive results (Seligman & Csikszentmihalyi, 2000). In fact, Seligman, (2002) a prolific researcher in positive psychology, suggests that focusing on personal strengths "rather than trying to remediate shortcomings, is a powerful path to well-being" (as cited in Carruthers & Hood, 2007, p. 11). This shift in framework has implications that have and will continue to shape the RT profession.

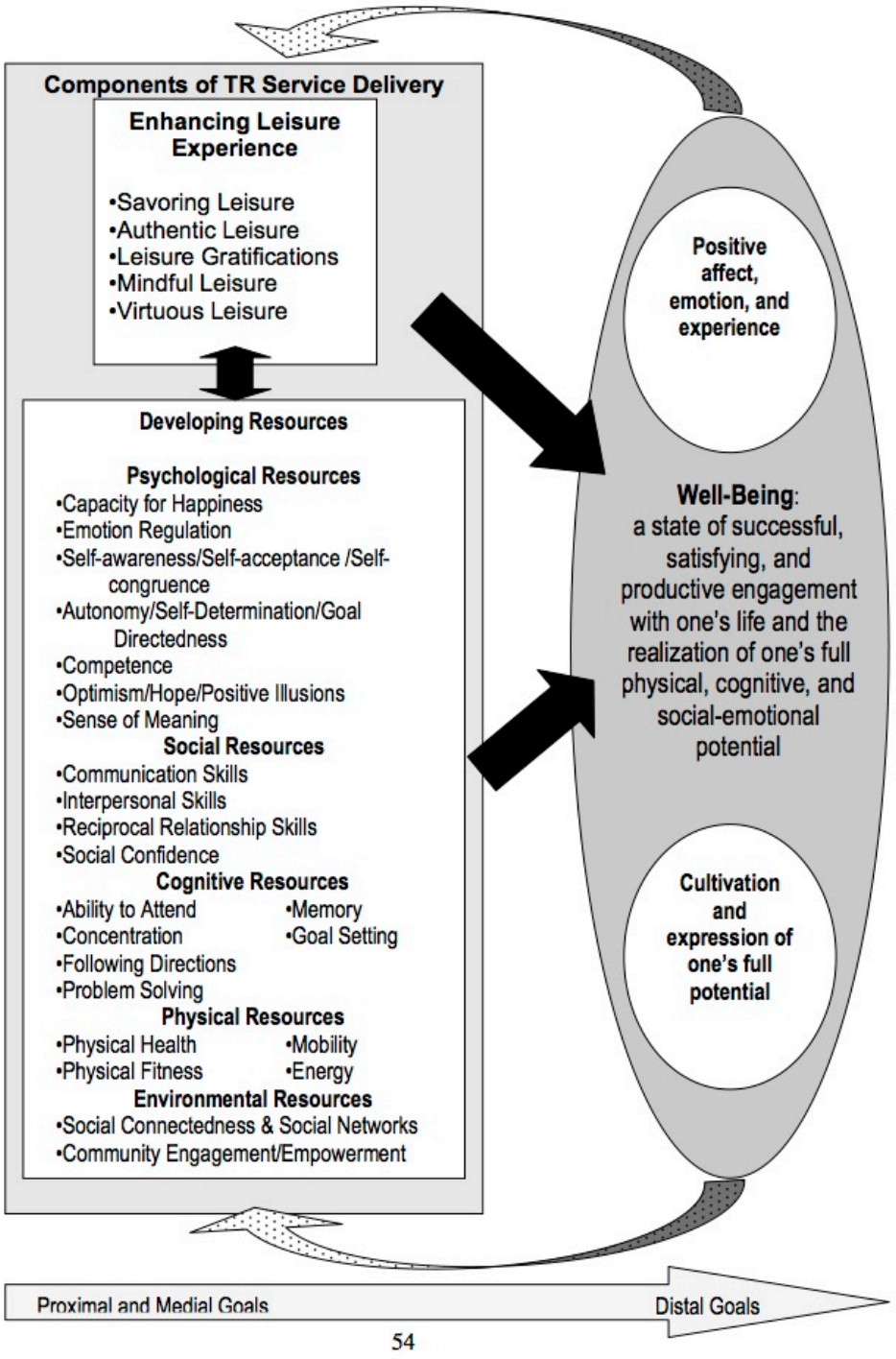

Figure 1. Components of the Leisure and Well-Being Model

LWM and Well-Being

Capitalizing on this strength-based approach, the overall goal of the LWM is to help individuals achieve a state of well-being. In other words, when a recreation therapist facilitates services using the LWM as a framework, clients served will develop "successful, satisfying and productive engagement with one's life and the realization of one's full physical, cognitive, and social-emotional potential" (Pollard & Rosenberg 2003, as cited by Carruthers & Hood, 2007 p. 18). This definition of well-being embraces the strength-based perspective; thus practice delivered through the model should empower individuals to maximize their ability to flourish and thrive, ultimately achieving well-being (Carruthers & Hood, 2007).

The LWM takes into account the multidimensional disposition of human development, while focusing on strengths by addressing the five domains of human functioning. Carruthers and Hood (2007) identify two dimensions of well-being that serve as focal points for the RT profession in order to increase well-being. These focal points include the following: (a) increasing positive emotion, affect, and experience (Carruthers & Hood, 2007; Davidson, Shahar, Lawless, Sells, & Tondora, 2006; Seligman, 2002a); and (b) the cultivation and expression of one's full potential (Carruthers & Hood, 2007; Fava & Runi, 2003; Keyes & Waterman, 2003). The well-being literature provides two fundamental perspectives to achieving well-being as the desired outcome. These views are linked, yet provide different, but essential components of attaining well-being. Both perspectives are critically important to the LWM and are accepted in its framework as companion principles to attaining well-being.

The first perspective is the hedonic view, which suggests that life's objective is to

experience the maximum amount of pleasure. Philosophers who have investigated the hedonic view suggest that happiness is the sum total of these pleasurable moments (Ryan & Deci, 2001). This view is most often measured by addressing subjective well-being, consisting of three components: life satisfaction, the presence of positive mood, and the absence of negative mood (Diener & Lucas 1999; Keyes & Watterman, 2003). These components make up the human experience known as happiness, which is central to well-being (Diener & Lucas 1999; Folkman & Moskowitz, 2000; Seligman, 2002a).

Positive Emotion as a Means to Well-Being

Positive emotion and experience are vital for RT professionals using leisure experiences to generate well-being as an outcome. Peterson (2006) noted, "positive emotion is complex, incorporating subjective feelings along with characteristic patterns of psychological arousal, thoughts and behaviors" (p. 56). Although positive emotion is complex in nature, the LWM views positive emotion as an all-encompassing term that refers to positive affect, positive emotion, and positive experience (Snyder & Lopez, 2006). This definition is inclusive to experiences that take place in the present as well as the past and future (Bryant & Veroff, 2007). When an individual experiences positive emotion as it has been defined, the individual is more likely to attain well-being. Thus, this perspective identifies the importance of generating positive emotion as a means to achieving well-being.

Cultivating and Expressing Full Potential as a Means to Well-Being

The second perspective of well-being as a desired outcome is the eudemonic view. This viewpoint suggests that happiness is found when an individual expresses virtue, or in other words, does what is worth doing (Diener & Lucas 1999). It distinguishes between momentary pleasure or gratification and satisfaction that produces or facilitates human growth, self-actualization, and becoming fully functional (Fromm 1981; Keyes & Waterman, 2003). Thus, the eudemonic view establishes the need to cultivate one's full potential in order to attain overall well-being.

For most people, positive mood is not enough to produce optimal well-being; rather, people have an innate desire to develop their strengths and capacities in meaningful ways, finding that their lives have served a purpose. This is achieved through the attainment of autonomy, personal growth, self-acceptance, life purpose, mastery, and positive relatedness (Ryff & Singer, 1998). These six aspects of human actualization define psychological well-being both theoretically and operationally, identifying factors that promote health and well-being. According to the human development literature, these aspects provide the capacity and framework that support well-being and can be intentionally fostered. Further, this focus on human potential should be an important outcome of health and human service professionals, specifically in the RT profession.

In order to provide experiences that will likely nurture positive emotion and the cultivation and expression of one's full potential, the LWM has established two main proximal goals that serve as operational objectives to attaining well-being. These proximal goals include the following: a) increasing the value of leisure and enhancing experiences, and b) providing psycho-educational experiences that assist in developing

resources (Carruthers & Hood, 2007). Both components are necessary in articulating this model and are a vehicle in moving toward the goal of well-being.

Leisure Experiences

First, understating leisure is critical to understanding the LWM, as leisure is a foundational concept. The conceptual definition of leisure as identified by Carruthers and Hood (2007) explains that leisure experiences are, "pleasant in expectation, experience, or recollection; intrinsically motivated; operational in nature; autonomous; and engaging" (p. 1). This definition of leisure encompasses recreation and play, viewing these engagements as less structured, yet meaningful activities. The focus of the leisure experience is not on the amount of time spent, but the quality of meaning that the experience provided.

With an importance on these leisure experiences, the model provides five ways in which meaning can be cultivated in order to support well-being. Each leisure experience uniquely and significantly impacts the cultivation of optimal well-being. The first leisure experience is identified as savoring leisure. This is understood as being mindful of the emotions that occur as you engage in the leisure experience (Bryant & Veroff, 2007). When seeking this type of experience evidence suggests the participant intentionally finds opportunities that will likely promote positive emotions (Bryant & Veroff, 2007; Lykken, 2000; Seligman, 2002). These intentional activities can be facilitated by a recreation therapist and are noted as the most effective approach to enhance happiness and positive emotion, which ultimately facilitates well-being (Seligman, 2002; Sheldon & Lyubomirsky, 2004).

The next leisure experience that supports well-being is known as authentic leisure. Harter (2002) defines authenticity as "knowing and owning one's personal experiences" (as cited by Carruthers & Hood, 2007, p. 10). Owning one's personal experiences hinges upon the concept of self-awareness which involves emotions, values, beliefs, thoughts, actions, and other factors that are directly connected to an individual. When based in self-awareness, authentic leisure experiences allow for individual exploration and expression and will likely assist in the development of autonomy, which in turn nurtures well-being (Masaya & Masahiro, 2005; Sheldon & Kasser, 2001).

Leisure gratification is the third way in which meaning through leisure experiences can be cultivated. Gratification is explained in the literature as engaging in enjoyable, yet challenging activities, rather than just the cultivation of positive emotion (Csikszentmihalyi, 1990; Seligman, 2002). Gratification allows for more than positive emotion, it provides a sense of accomplishment and value, allowing for personal development in meaningful ways (Seligman, 2002). The implications for leisure experiences to impact development are substantial. RT facilitated through leisure provides a platform to challenge participants to explore, express, and try new things while engaging in the development process (Carruthers & Hood, 2007). Participants are directly benefited as they cultivate well-being as a result of self-development through these leisure gratification experiences.

The next leisure experience is mindful leisure, which is conceptually defined as, "an enhanced attention to and awareness of the current experience or present reality" (Brown & Ryan, 2003, p. 822). Mindful leisure has typically revolved around the realm of yoga, meditation, and other relaxation techniques. These techniques provide many

benefits for the participant that are directly connected to well-being and include: stress reduction, heightened immune response, increased self-esteem, memory enhancement, and other health-related outcomes.

Finally, virtuous leisure is the last leisure experience that has been identified in the model to impact well-being. Virtuous living suggests that an individual takes part in the service of something that is outside or larger than the self (Seligman, 2002). Volunteerism is often identified as a leisure experience and its conceptual definition parallels with the definition of leisure (Miller et al., 2002; Stebbins, 2001). Benefits such as connections, competence, and interdependent relationships have been identified as outcomes of participation in serving something that is larger than the self (Lyubomirsky, Sheldon, & Schkade, 2005). These benefits indicate that virtuous leisure is an important component in developing well-being.

In summary, each of the leisure experiences provides recreation therapists with a diverse variety of methods in which they can assist individuals in cultivating well-being. As leisure experiences are facilitated, participants will be more likely to develop the resources necessary to support and sustain well-being across the lifespan. Carruthers and Hood (2007) state:

> In order for leisure to have the greatest benefit, it must be savored fully, selected thoughtfully with one's personal capacities and interests in mind, result in personal growth in some meaningful way, entail absorption in the experience at hand and disengagement from day-to-day concerns, and provide opportunities to make a contribution to something larger than oneself. These dimensions form the basis of RT interventions designed to enhance the value of leisure to well-being. (p. 14)

When working from this framework, these dimensions provide the necessary components in realizing positive emotion and the cultivation and expression of one's full potential.

They also provide an optimal framework in which the facilitation of psycho-educational interventions can be implemented in order for an individual to develop resources to support well-being (Carruthers & Hood, 2007).

Developing Resources

The literature associated with resource development suggests the development of resources that directly impact well-being can be facilitated through a variety of interventions (Fava & Runi, 2003; Joseph & Linley, 2004). The LWM advocates for this development of resources to be facilitated through psycho-educational interventions. The model provides five broad categories in which resources can be divided into psychological resources, social resources, cognitive resources, physical resources, and environmental resources. In conjunction with the five categories of resources, the LWM provides ideas that will assist the practitioner in identifying specific or more detailed resources. These ideas serve as an example and area of support for the RT profession to engage in interventions that address these resources and encourage well-being.

Developing resources not only supports well-being as a whole, but it also increases positive emotion and assists individuals in cultivating and expressing full potential. Positive emotion has been directly linked to the development of resources in a number of ways (Fredrickson & Branigan, 2005). The Broaden and Build Model of positive emotion (Fredrickson, 2000) linked these concepts by attaching the benefits of positive emotion to resource development. This perspective indicates that positive emotion can assist an individual in attaining the resources necessary to support well-being.

Youth and human development specialists support this process of resource development. Their research indicates that the development of resources is a result of the interactions between the person and his or her social environment (Benson, 1997; Caldwell & Smith, 2006; Kleiber, 1999). Other fields such as counseling (Frisch, 2006; Lent, 2004; Smith, 2006), social work (Saleeby, 2007; Sharry, 2004), and RT (Carruthers & Hood, 2007) take a psycho-education approach in facilitating experiences for the development of these resources. While techniques and processes may differ, the goal of developing resources to support well-being is united and supported.

Leisure experiences and the development of resources facilitate experiences for which participants can cultivate well-being. This is supported by theories both outside of and inside the RT profession. The theoretical support for the LWM comes from the positive psychology, human and youth development, health and human services, leisure, psychology, counseling, and social work disciplines. This emergence of literature has created a model in which RT professionals can facilitate well-being. The depth of literature related to well-being and the LWM provides many resources for RT professionals.

Professional practice delivered through the LWM will likely assist participants in achieving well-being through stimulating positive emotion and cultivating potential. As the recreation therapist enhances leisure experiences and provides psycho-educational interventions in order to develop resources, the participant will be propelled into achieving a state of "successful, satisfying, and productive engagement with one's life and the realization of one's full physical, cognitive, and social-emotional potential" (as cited by Carruthers & Hood, 2007, p. 18). Through this model, RT professionals are

ideally poised to facilitate the development of skills that create a healthy life. This can be accomplished when the LWM is implemented in environments that support early and middle childhood development. Youth and human development researchers suggest that supportive environments, experiences, and relationships are fundamental to the successful development of youth (Benson, 1997; Caldwell & Smith, 2006; Kleiber, 1999).

School-Based Setting

One environment that supports early and middle childhood development is the traditional school setting. Lezotte and Snyder (2010) educational researchers identified standards within the school system that are key in making schools an optimal environment for learning. He identified that the school environment is a safe place that promotes the learning process. Ideally, schools set high educational expectations for their students and continuously monitor their progress. The school environment provides an optimal place for students to develop important skills and knowledge for youth development. One key reason for this is that the students' needs are a priority in the educational system.

This priority provides an optimal environment for learning the curriculum established by local and national departments of education. The Core Curriculum standards provide an opportunity for students to engage in learning experiences that improve their ability to think, both critically and analytically. These experiences empower students through the learning process, allowing them to take control of their learning outcomes.

The Core Curriculum is segmented by subject matter and identifies standards that each child must meet after having participated in the educational system in a given grade level. The standards do not dictate the delivery of the content but provide standards and objectives that an educator can strive to attain when teaching the intended curriculum. In the Health Education portion of the curriculum, the first standard states, "The students will learn ways to improve mental health and manage stress" (Utah State Core Curriculum, 2010). This Core Curriculum standard emphasizes the importance of developing skills within the school environment that create a healthy life.

The practice of RT, as it has been identified, is an optimal approach to facilitating the development of skills that create a healthy life, within a school environment. RT in the school system involves the provision of RT services that facilitate the full participation of children in school programs. Interventions are used to promote health, growth, development, and independence through leisure pursuits, using the Core Curriculum standards as the outcome of RT services. The Core Curriculum, in conjunction with the LWM, facilitates the optimal establishment of curriculum development to guide the recreation therapist in helping participants achieve well-being, making RT the ideal profession in assisting children in early and middle childhood develop HRQoL and ultimately well-being.

Conclusion

In conclusion, an individual's health and well-being is on the agenda of local and national agencies and the movement towards prevention is becoming evermore apparent. This movement has a focus on achieving a state of health as outlined by the WHO's

definition of health, aiming for well-being and not merely the absence of disease or infirmity (WHO, 1948). One component of achieving a state of well-being is addressing HRQoL. This term allows health and human service professions to identify the impact that quality of life has on overall health, which is directly connected to overall well-being.

HRQoL and well-being are deeply rooted in early and middle childhood. These developmentally sensitive periods are foundational for healthy development across the lifespan. In order to achieve HRQoL in early and middle childhood, mental health is one aspect of health that must be addressed. One way to address mental health in early and middle childhood is to implement interventions that help children develop skills that create a healthy life.

An optimal way to facilitate skills that create a healthy life is through the delivery of RT interventions. RT is a systematic process that is most efficiently delivered through a strength-based approach, which is inherently built into the LWM (Carruthers & Hood, 2007). Delivered through the LWM, RT is a practical approach to facilitating these interventions within the school system.

Further research needs to be administered in order to increase the validity of the impact of addressing mental health concerns in early and middle childhood. The literature provides implications that RT interventions are likely to impact HRQoL within a school setting. As RT is delivered through the LWM, participants who engage in the interventions are likely to achieve a state of "successful, satisfying, and productive engagement with one's life and the realization of one's full potential" (as cited by Carruthers and Hood, 2007, p. 18). In efforts to investigate the role that RT interventions

can play in addressing mental health concerns in early and middle childhood, the following hypotheses have been formed for this study:

H1: HRQoL will increase for participants who receive the designed curriculum.

H2: HRQoL will not increase for participants who do not receive the designed curriculum.

H3: HRQoL posttest scores will be significantly higher for treatment group than for the control group.

CHAPTER III

METHODS

Children who experience increased levels of stress in early and middle childhood are at an increased risk for symptoms of depression and anxiety, resulting in an impaired HRQoL (Schore A., 1999). Therefore, the purpose of this study was to determine if an RT intervention focused on the personal implementation of skills that create a healthy life, delivered through the Leisure and Well-Being Model in a school-based setting, would result in an increased HRQoL. This study examined the effectiveness of an 8-week program intended to impact the HRQoL of fourth-graders and was assessed using a standardized HRQoL measurement.

Setting

Data were collected at an elementary, public, charter school in a suburb of a large city in Utah. The mission of the school is to think critically, communicate effectively, and act responsibly in an ever-changing global community. The Utah State Core Curriculum standards as outlined by the Utah State Department of Education are implemented within the classroom. Additionally, this school is an AdvancedEd accredited school as well as an authorized International Baccalaureate Primary Years Programme School. The primary goal of these programs is to develop inquiring, knowledgeable, and caring young people

who create a better and more peaceful world through their actions. These programs encourage a framework in which faculty members can facilitate both the Utah State Core Curriculum as well as the mission of the school. This framework provides a robust foundation for implementing the critical components of this study.

The classroom setting in the school is established upon this institutional framework. As such, there are no more than 25 students in a given class, allowing for a teacher-to-student ratio that is more conducive for acquiring the knowledge skills intended by the school.

Participants

Participants were recruited following approval from the Institutional Review Board at the University of Utah. There are indications that early and middle childhood (birth to 8 and 6 to 12) developmental stages are ideal for acquiring skills that will support and sustain skills for a healthy life. Therefore, this study investigated the affects of this intervention through examining the impact on fourth-grade students. During the 2014-2015 school year, there were 7 classes of fourth-graders with the standard of 25 students per class. A total of 175 participants, from the fourth grade (ages 9 to 10 years old) were invited to participate in this study, with the final sample size being 110 children. Of the 110 children who participated in the study, 49 were male and 61 of were female with the average age being 9.5. The treatment group consisted of 79 children with 31 participants in the control group.

Measurement

HRQoL was measured using the Pediatric Quality of Life Inventory – Version 4.0 (PedsQL 4.0) Generic Core Scales. The PedsQL 4.0 is a brief, 23-item inventory designed to measure HRQoL in healthy as pediatric populations, as well as those with chronic health conditions (see Appendix A). For the purpose of this study, the generic core scales of the PedsQL were used to assess HRQoL in children in a school-based setting. The scales are available in both child self-report and parent proxy report formats with three child versions of self-report (for ages 5 to 7, 8 to 12, and 13 to 18) and four parent versions of proxy report (for ages 2 to 4, 5 to 7, 8 to 12, and 13 to 18). The items on all forms are essentially alike, differing only in terms of cognitively appropriate language and verb tense, depending on the age of the child.

The PedsQL scales were designed to measure the core domains of health as outlined by the World Health Organization, as well as school functioning. The generic core scales are comprised of 23 items, including four subscales consisting of questions about the child's physical functioning (8 items), emotional functioning (5 items), social functioning (5 items), and school functioning (5 items). The PedsQL scores each subscale separately, in addition to a total score (derived from all items) and a psychosocial health summary score (derived from the emotional, social, and school functioning items) for a detailed analysis (Varni, 2001).

Items are rated on a 5-point Likert-type scale (with the exception of the young child report, which has a 4-point Likert-type scale) and are scored as indicated: 0, it is never a problem to 4, it is almost always a problem. This scoring means that higher scores indicate a lower HRQoL. The assessment was administered by asking the

participants to determine to rate each item on the scale over the past month using the 5-point scale. The PedsQL 4.0 scale took approximately 10 minutes to complete (Varni et al., 2001) and was used for this study due to the validity and reliability indicated in previous studies as well as its concise manner in which it can be administered. Previous research has indicated the internal consistency for the PedsQL 4.0 self-report ranged from $\alpha = .68$ for school functioning to $\alpha = .88$ for total score (Varni et al., 2001). For this study, tests of internal consistency on the pretest and posttest both yielded good internal consistency with $\alpha > .90$. Validity has been demonstrated using the know-groups method, correlations with indicators of morbidity and illness burden, and factor analysis (Varni et al., 2001).

Procedures

After IRB approval was obtained, a letter detailing the nature of the research study, a participation consent form, and a copy of the PedsQL 4.0 were sent home to the parents of all students in fourth grade (see Appendix B). Parents were asked to return the consent form to the school either through their child or in person, and received a reminder email from their student's teacher, 1 week following distribution. At the end of 2 weeks, 110 completed participant consent forms were collected.

Each participant in the fourth grade was administered the PedsQL 4.0 during week 1 and week 8 of the program. Four of the seven fourth-grade classes (Group 1) received the full curriculum during weeks 2 through 7. The remaining three classes (Group 2) were the control group and completed the measurement to identify HRQoL. Group 2 did not receive the curriculum, but was tested again at the end of the same 8-

week period as Group 1. This design allowed for adequate data collection to test the hypotheses of the study. The measurement was administered the same way both times, allowing for familiarity for the participants.

An recreation therapist who is a licensed in the state of Utah as a Therapeutic Recreation Specialist (TRS) and who is also a Certified Therapeutic Recreation Specialist (CTRS) administered the PedsQL 4.0. The recreation therapist began by reading the directions to each participant in the classroom and asking if there were any questions. Questions were addressed at this time and participants were instructed that they not ask any further questions or make comments as these may sway the opinions and responses of others.

The recreation therapist facilitated the remainder of the measurement by reading the 23 individual items on the scale, one-by-one. The facilitator allowed adequate time between each item on the scale so that participants could respond. Upon completion, the facilitator collected the measurement from the participants and scored them according to the facilitator guide that is distributed with the measurement. Makeup administration was not available as the measurement was administered in the first week of the session. This session also provided foundational information in which the participants needed for the remainder of the program.

Curriculum

The Utah State Board of Education established policy regarding the core standards that are to be met by all students K-12. These standards inform curriculum development and allow for standardization of education statewide. The core standards

identify critical information for students to learn in order to obtain academic achievement.

One subject from the criteria includes that of Health Education. Health Education has seven standards identified as competencies that a student must meet. Standard one of the Health Education section states: Students will learn ways to improve mental health and manage stress. Standard one, its associated objectives, and the Leisure and Well-Being Model have informed and guided the development of the curriculum. The program was delivered over a period of 8-weeks with each session having a 40-minute duration. There are four objectives listed to operationalize standard one. This health education standard, its four objectives, and the curriculum outline are a follows:

Standard 1: The Students will learn ways to improve mental health and mange stress
Objective 1: Develop strategies for appropriately and safely expressing emotion
Objective 2: Demonstrate acceptance of self and others
Objective 3: Develop assets that help promote resiliency
Objective 4: Demonstrate positive strategies for managing stress

HEALTHY ME!
Week 1

- Assessment
- Intro to Standard 1: The Students will learn ways to improve mental health and mange stress

Week 2 - Body
Physical health

- Fitness/Flexibility
- Energy

Curriculum Ties:
Objective 2: Demonstrate acceptance of self and others
Objective 3: Develop assets that help promote resiliency
Objective 4: Demonstrate positive strategies for managing stress

Week 3 – Heart
Emotional health

- Self-Awareness
- Identification and Communication Skills

Curriculum Ties:
Objective 1: Develop strategies for appropriately and safely expressing emotion
Objective 2: Demonstrate acceptance of self and others
Objective 4: Demonstrate positive strategies for managing stress

Week 4 – Heart
Emotional health
- Emotional Regulation
- Competence

Curriculum Ties:
Objective 1: Develop strategies for appropriately and safely expressing emotion
Objective 2: Demonstrate acceptance of self and others

Week 5 – Mind
Mental health
- Identify stress and personal stressors
- Competence

Curriculum Ties:
Objective 1: Develop strategies for appropriately and safely expressing emotion
Objective 3: Develop assets that help promote resiliency
Objective 4: Demonstrate positive strategies for managing stress

Week 6 – Mind
Mental health
- Problem Solving
- Autonomy/Self-Determination

Curriculum Ties:
Objective 1: Develop strategies for appropriately and safely expressing emotion
Objective 3: Develop assets that help promote resiliency
Objective 4: Demonstrate positive strategies for managing stress

Week 7 – Mind
Mental health
- Capacity for Happiness: Optimism/Hope/Positive Illusions
- Social Confidence

Curriculum Ties:
Objective 1: Develop strategies for appropriately and safely expressing emotion
Objective 2: Demonstrate acceptance of self and others
Objective 3: Develop assets that help promote resiliency
Objective 4: Demonstrate positive strategies for managing stress

Week 8
- Review
- Assessment
- Closure

The Healthy Me! curriculum is psychoeducationally directed. It uses recreation as an experiential education modality to work toward the goals and objectives that the Utah State Core Curriculum has outlined for Health Education. Healthy Me! was developed and implemented in order to test the hypotheses and gather information on the impact that RT interventions have on quality of life. Data were collected and analyzed to determine the impacts of Healthy Me!

CHAPTER IV

RESULTS

A series of *t*-tests were conducted in order to test the hypotheses. First, to test H1, a paired *t*-test revealed no significant difference ($p = .872$) in HRQoL between pretest ($M = 16.897$, $SD = 11.764$) and posttest ($M = 16.691$, $SD = 14.024$) for the treatment group. This means that H1 was unsupported.

A second paired *t*-test was used to test H2, which stated that the control group would not increase in HRQoL. The results of this paired *t*-test were significant ($p = .030$); however, a look at the means revealed that HRQoL levels decreased for the control group between the pretest ($M = 15.200$, $SD = 11.976$) and posttest ($M = 19.800$, $SD = 16.626$). This means that H2 was supported.

Finally, an independent samples *t*-test was used to test H3, which stated that there would be a significant different between posttest scores in the treatment group and the control group. This hypothesis was unsupported as results of the analysis revealed no significant difference ($p = .373$) between the two groups.

CHAPTER V

DISCUSSION

The present study considered the potential impact that delivering an RT intervention within a school-based setting has on an increased HRQoL. The study utilized an 8-week intervention structured to facilitate learning and practical application experiences so that students could develop skills to support HRQoL. Research assistants focused on the Utah State Core Curriculum health education standards to engage students in a learning environment that is conducive to their everyday learning structure. Results of this study suggest HRQoL was maintained from baseline to postprogram scores for the treatment group, while they decreased for the control group. This section provides a brief overview of the study, explains the results, considers limitations of the study, and finally, offers recommendations for future research and practice.

Study Overview

Children who experience increased levels of stress in early and middle childhood are at an increased risk for symptoms of depression and anxiety, resulting in an impaired health related-quality of life (HRQoL; Shonkoff, Andrew, Garner, 2012). Therefore, the purpose of the present study was to determine if an RT intervention focused on the

personal implementation of skills that create a healthy life, delivered through the Leisure and Well-Being Model in a school-based setting, would result in an increased HRQoL.

This program was designed and implemented as an RT intervention. RT is a systematic process that is most efficiently delivered through a strength-based approach, which is inherently built into the LWM (Carruthers & Hood, 2007). Delivered through the LWM, RT is a practical approach to facilitating these interventions within the school system. This study examined the effectiveness of an 8-week program intended to impact the HRQoL of fourth-graders. The curriculum was delivered through RT interventions and HRQoL was measured through using a standardized HRQoL measurement.

Interpretation of Results

Results relating to the study's three hypotheses were yielded using a series of *t*-tests. H1 (HRQoL will increase for participants in the treatment group) was unsupported as the participants in the control group had no significant increase in their HRQoL. These participants did, however, maintain their HRQoL over the course of the 8-week program. This was not the case for the participants in the control group, who's HRQoL decreased over the 8 weeks in support of H2, which stated that HRQoL will not increase for participants who do not receive the designed curriculum. Finally, H3 stated: HRQoL posttest scores will be significantly higher for treatment group than for the control group. This hypothesis was not supported as there was not a statistically significant difference (p .373) in posttest scores between the treatment group and the control group.

While the anticipated increase in HRQoL did not occur for participants in the treatment group, the unanticipated decrease in HRQoL for participants in the control

group might provide some explanation for why in support of the validity of the designed curriculum. Together, these results could indicate that the treatment in this study was effective at mitigating decreases in HRQoL, having some impact on the lives of the individuals simply by maintaining their current HRQoL. As the school year progresses, added stressors such as testing and homework levels increase in academia on all levels of education (Lewis, Sheldon, & Sheila, 1996). One explanation of the results of this study includes the possibility that the program provided students in the treatment group with skills that were able to support them with the various stressors that could likely impact their quality of life. This explanation would also justify the decrease in HRQoL in the control group, as these students were not taught the skills needed to support themselves as their stress levels increased.

When children experience and increased amount of stress, it is likely to impact not only their academic performance, but also their overall quality of life (Hoghughi, 1980). As the academic and testing rigor increase as the school year comes to the end, it is critical for a child to be able to identify and handle stress (Helms, 1996). One way to do this is to identify sources of the stress and how it is manifesting in the body. If a child is unaware of how to identify stress, he or she will likely not be able to implement a healthy life skill in order to cope with that given stressor. If he or she experiences stress too often or at too high of a level, it puts him or her at a higher risk for illnesses like anxiety and depression across the lifespan (Shonkoff, Andrew, & Garner, 2012). Members of the control group were likely unable to develop and implement skills that maintained the stress they experience through the duration of the 8-week period of time. This could explain the decrease in HRQoL for the control group throughout the 8-week

session, and consequently, would support the idea that the intervention was effective simply by maintaining HRQoL levels among members of the treatment group.

Limitations of the Study

As with all applied research, some limitations of this study may have affected the outcomes, findings, and interpretation of the results. These limitations include the numbers of participants in the treatment versus control groups, the length of the intervention, and participant interrupts. The first limitation resulted from logistical issues leading to an imbalance between the treatment and control groups. Teachers who were involved as part of the treatment group put in extra time and effort to ensure that these consent forms were returned to the researcher, while the teachers who were involved in the control group did not take such precautions. This led to fewer individuals participating in the control group than the treatment group. Unfortunately, due to time constraints, the program proceeded, with an unbalanced design.

Another concern is the 40-minute duration of the weekly sessions. Each week, the teachers allowed 40 minutes per session for an 8-week period of time. While the program was able to communicate the Utah State Core Curriculum Standard and its associated objectives during the 8-week program, there was a weekly time constraint trying to engage students in an effective RT intervention within the 40-minute timeframe. Classroom management techniques, transitions, and engaging in the learning process were more time intensive than originally anticipated. In the future, this limitation could be resolved by allocating 60 minutes per session in order to more effectively implement the goals and objectives of each session with the students.

A final concern would be the participant interrupts. Interrupts of a participant's planned behaviors are those things that limited participation in the Healthy Me! program. For this study, these were absences due to illness, behavioral consequences, or other programing within the school such as speech therapy. Many interruptions occurred throughout the study with various participants. Each week was designed to build on the information that was taught the previous week, which required the student to receive the information from the last session from a brief overview given at the beginning of the weekly session. The data for those students who were absent on a regular basis (5 or more sessions) for programming within the school were removed from final analysis, as they were not able to gather enough information to impact their quality of life. Although some participant interrupts are beyond the control of the researcher, one way to resolve this issue would be to discuss options with the administrative faculty and curriculum director of the school in order to find the time the best fits with the programming that is already established within the school. This would allow for each student to have the opportunity to participate weekly in the program.

Implications for Future Research

This study examined the effects that an RT intervention has on the HRQoL of students in a fourth-grade class. The results provided an interesting basis for future research that can delve more deeply into the issues of HRQoL.

To begin, the limitations mentioned could all be improved upon to strengthen future studies. It would be beneficial for future research to include larger sample sizes. This would provide research with a more adequate understanding of the effectiveness of

the program with increasing HRQoL. Moreover, the limitations also addressed the imbalance of treatment versus control group. In the future, it is necessary to ensure that these are evenly paired, as this will increase measurement accuracy when analyzing the results.

Further, the current study was implemented in a public charter school in an affluent suburb of Salt Lake City, Utah. While the students at this school were able to fully engage and participate in this program, it would be useful for future research to investigate the impacts that this study has with more diverse populations. Further, the present study addressed early and middle childhood as a whole; however, the differences in development between boys and girls suggest that there are implications for programming catered to their specific development (Rose & Rudolph, 2006). It would be valuable for future research to investigate the effectiveness of gender specific programs.

Implications for Practice

In addition to the implications for future research, the results also yielded ideas for applying our knowledge of HRQoL in a practical setting. This study provided important implications for professional practice within RT. Specifically, it addresses implications for RT professionals to implement prevention-focused, mental health interventions within a school-based setting. This section discusses potential opportunities for practice.

Current RT practice focuses primarily on the rehabilitation and care of individuals with illness or disability. However, the current trends of health care have moved from a "fix it" approach to a preventative approach (Eccles, 1999). The present study provides

practitioners with a framework for utilizing RT in the promotion of health and the focus on preventative measures in mental health. Health care is moving into this prevention movement and it is important for the RT profession to establish itself within this spectrum of practice amongst other health care professions (Halfon, 2009).

Another implication that arises with this study for practice is the opportunity that exists for implementing RT interventions within a school-based setting. It is not a foreign concept to find a RT practicing within the school system, but it is rare, and it is limited. It is important to understand from a practical approach that implementing research within a school-based setting is within the scope of practice of a RT. Practicing within a school-based setting would provide the RT profession with the opportunity to expand its reach and provide services on a larger scale.

Most RT professionals who work within a school system work in smaller groups, rather than the inclusion of the class as a whole. The present study worked from an inclusion approach and aimed to teach healthy life skills for students to use throughout their lives. This allowed for the program to work from a strength-based approach, rather than trying to teach skills as a means to fix a deficit. Students were able to learn and implement healthy life skills with their peers and practiced these skills throughout the week. This opportunity provided a support system for the students as well as a safe environment to share and learn together.

Conclusion

Although the present study only supported the second hypothesis of the study, there are implications of the impact that this study can have on the RT profession. The

present study provides evidence that RT interventions administered in a school-based setting aimed to address HRQoL prevents a decline of HRQoL in early and middle childhood. It also provides a framework for future research to be administered in order to increase the validity of the impact of addressing mental health concerns in early and middle childhood. These implications suggest that RT interventions are likely to impact HRQoL and well-being within a school-based setting. Therefore, when RT is delivered through the LWM, participants who engage in the interventions are likely to achieve a state of well being or "successful, satisfying, and productive engagement with one's life and the realization of one's full potential" (as cited by Carruthers and Hood, 2007, p. 18).

APPENDIX A

PEDIATRIC QUALITY OF LIFE INVENTORY VERSION 4.0

Name: _____

Gender:_____

Teacher:_____

Date:_____

PedsQL™

Pediatric Quality of Life Inventory

Version 4.0

CHILD REPORT (ages **8-12**)

DIRECTIONS

On the following page is a list of things that might be a problem for you. Please tell us **how much of a problem** each one has been for you during the **past ONE month** by circling:

0 if it is **never** a problem
1 if it is **almost never** a problem
2 if it is **sometimes** a problem
3 if it is **often** a problem
4 if it is **almost always** a problem

There are no right or wrong answers.
If you do not understand a question, please ask for help.

*In the past **ONE month**, how much of a **problem** has this been for you …*

ABOUT MY HEALTH AND ACTIVITIES ***(problems with…)***	**Never**	**Almost Never**	**Some-times**	**Often**	**Almost Always**
1. It is hard for me to walk more than one	0	1	2	3	4
2. It is hard for me to run	0	1	2	3	4
3. It is hard for me to do sports activity or	0	1	2	3	4
4. It is hard for me to lift something heavy	0	1	2	3	4
5. It is hard for me to take a bath or shower	0	1	2	3	4
6. It is hard for me to do chores around the	0	1	2	3	4
7. I hurt or ache	0	1	2	3	4
8. I have low energy	0	1	2	3	4

ABOUT MY FEELINGS ***(problems with…)***	**Never**	**Almost Never**	**Some-times**	**Often**	**Almost Always**
1. I feel afraid or scared	0	1	2	3	4
2. I feel sad or blue	0	1	2	3	4
3. I feel angry	0	1	2	3	4
4. I have trouble sleeping	0	1	2	3	4
5. I worry about what will happen to me	0	1	2	3	4

HOW I GET ALONG WITH OTHERS ***(problems with…)***	**Never**	**Almost Never**	**Some-times**	**Often**	**Almost Always**
1. I have trouble getting along with other kids	0	1	2	3	4
2. Other kids do not want to be my friend	0	1	2	3	4
3. Other kids tease me	0	1	2	3	4
4. I cannot do things that other kids my age can	0	1	2	3	4
5. It is hard to keep up when I play with other	0	1	2	3	4

ABOUT SCHOOL ***(problems with…)***	**Never**	**Almost Never**	**Some-times**	**Often**	**Almost Always**
1. It is hard to pay attention in class	0	1	2	3	4
2. I forget things	0	1	2	3	4
3. I have trouble keeping up with my	0	1	2	3	4
4. I miss school because of not feeling	0	1	2	3	4
5. I miss school to go to the doctor or	0	1	2	3	4

APPENDIX B

PARENTAL PERMISSION DOCUMENT

Dear Parents,

My Name is Jamie Bennett and I am a Master's Student at the University of Utah. I am a licensed and certified Recreation Therapist and as such intend to use my training and experience to conduct this research. My research focused on the mental and emotional well-being of children.

In efforts to do this I have developed a curriculum that is grounded in the Utah State Core Curriculum Standards, using Recreation Therapy interventions as a tool to deliver this curriculum. Below is the description and the rationale for the curriculum that has been developed. Please review the program description and the *Parental Permission Document* and return the signed document with your student to the school. You will also find a copy of the measurement that you child will be taking both on week one of the program as well as week eight of the program. I appreciate your time and consideration as I work to conduct research that ultimately strives to promote well-being and an increased quality of life.

During the study, please do not hesitate to contact me if you have any questions or concerns. Again, thank you for your time and consideration. I am excited to have the opportunity to work with Providence Hall to complete this research.

Best wishes,
Jamie Bennett TRS, CTRS
jme.bennett33@gmail.com
801-633-9254

HEALTHY ME!
Making Me a Well-Being

INTRODUCTION

Healthy Me! is an eight week curriculum designed for third to fifth grade students to develop the necessary skills to create a strong mental health which will increase well-being and quality of life for children. Its overall intended goal is to increase Health Related Quality of Life, ultimately striving for increased well-being across the lifespan.

The World Health Organization (WHO) defines health as, "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1948). In order to attain and maintain health across the lifespan, emerging evidence suggests that early and middle childhood development stages set the foundation for healthy development (Eccles, 1999). These developmental stages are important for an individual's health related quality of life (HRQoL). Although quality of life can be subjective, the Centers for Disease Control and Prevention (CDC) have defined HRQoL as encompassing an individual holistically, meaning well-being in each domain of health (CDC, 2011).

Foundationally, human development is defined by three separate but overlapping, overarching concepts that psychologists refer to as the biological, cognitive, and psychosocial domains (Allen & Marotz, 1989; Bransford, Brown, & Cocking, 1999). Each of these domains can be further categorized into the physical, social, emotional, cognitive and spiritual domains. Understanding each domain of health is foundational to distinguishing an individual's HRQoL. How a child develops each of the five domains during developmentally sensitive stages is likely to determine his or her HRQoL across the lifespan (Crain, 2000).

An important aspect of HRQoL is an individual's mental health. Mental health is not constrained to factors that lie within the emotional domain, but can be affected by any or all of the five domains. WHO explains mental health as, "a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community" (WHO, 2001). Research suggests that early childhood adversity and toxic stress can create lifelong effects to mental health (Schore, 1999). Biological and architectural changes to the brain can develop if a child experiences trauma or toxic stress in early to middle childhood, given that he or she does not understand how to deal with such events. When a child experiences trauma or toxic stress, the amygdala, or the portion of the brain that is responsible for emotional regulation, experiences what is called hypertrophy. Hypertrophy is the process in which the organ or tissue becomes enlarged due to an increase in the size of the cells within that particular region (Medilexicon, 2013). Thus, the child's enlarged amygdala undergoes neuroplasticity, or changes in the architecture of the developing brain. This change in the brain's structure, results in a "hyperresponsive

or chronically activated physiologic stress response, and increased potential for fear and anxiety (as cited by Shonkoff, J. et. al. 2011)."

Though the changes in the brain are not visible, toxic stress can result in permanent changes in both the structure and function of the brain. These changes generate more reactive behaviors in children and a diminished ability to cope with stress (Shonkoff, J. et. al. 2011). After an individual's amygdala has experienced hypertrophy, his or her ability to handle stress becomes a biological and mental health concern for the rest of his or her life. Consequently, there is a link between toxic stress in early and middle childhood, and mental health in adult life. This knowledge has developed the need for a strong presence in understanding preventative mental healthcare for children.

Growing recognition exists for prevention and health promotion tactics as a means for addressing mental health during these developmentally sensitive periods. These periods are when prevention, early intervention, and health promotion can produce the maximum benefits. The overwhelming statistics indicate that mental health is the leading cause of disability worldwide (WHO, 2001). Therefore, it is critical to examine interventions to educate and support children in developing skills and strategies that create a health life, as a means of improving mental health and ultimately the overall HRQoL.
An effective method of providing interventions to support the development of skills that create a healthy life is Recreation Therapy (RT). RT is the purposeful use of leisure and recreation as a means to maximize an individual's overall optimal health, well-being, and quality of life (Robertson & Long, 2008). RT is facilitated through a systematic process that involves assessment, planning, implementation, evaluation and documentation (Stumbo, 2008). The overall aim of RT is to generate outcomes for the individual participating in RT service. Outcomes are direct effects of service or observable changes that result from any given intervention (Hodges & Luken, 2000; Stumbo, 2011).

In order for children to acquire skills that create a healthy life, they should receive information from a variety of settings. However, school-based settings are an optimal environment for the development of these skills. Regulations for school curriculum in Utah have identified and established the need for the development and care for each individual's mental health. The first standard in the health curriculum as outlined by the Core Standards for Utah public schools states, "The students will learn ways to improve mental health and manage stress" (Core Binder, 2013). The missing component in the curriculum is the experiential practice and real world application that RT can provide. If the ill effects of toxic stress are likely to creating lifelong illness, then the development of skills to create a healthy life will assist children in managing toxic stress, which will likely generate higher HRQoL across the lifespan. Thus, using RT as an inclusive intervention in a school-based setting will likely provide the support need for children to develop the skills needed to create a healthy life.

Mental health has an impact on overall HRQoL. Consequently, it is imperative that greater effort and importance are placed in the development of skills that create a healthy life within the health curriculum of schools across the nation. Increasing these skills in early and middle childhood can promote an optimal HRQoL, which is likely to prevent the adverse health impact of toxic stress across the lifespan. Therefore, the purpose of this study is to determine if RT interventions within a school based setting, focused the personal implementation of skills that create a healthy life, will result in an increased HRQoL.

Healthy Me! is a holistic approach to addressing mental health in early and middle childhood. The curriculum designed in accordance with the Utah State Core Curriculum Health Education Standards, with a primary focus on Standard 1 and its associated objectives. The program is intended to be facilitated by a Utah State licensed and nationally certified Recreation Therapist, within the public school setting in Utah. The students will meet with the Recreation Therapist for eight consecutive weeks in 40 minutes group sessions through the duration of the program.

Parental Permission Document

BACKGROUND
Your child is being asked to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully. Ask us if there is anything that is not clear or if you would like more information. Please take time to decide whether you will allow your child to take part in this study.

The researcher's name is Jamie Bennett who is a Master's Student at the University of Utah. She is a licensed and certified Recreation Therapist and as such intends to use this training and experience to conduct this research. The research is focused on developing skills that support the mental and emotional well-being of children.

The purpose of this study is to determine if Recreation Therapy interventions implemented within a school-based setting, focused the personal implementation of skills that create a healthy life, will result in an increased quality of life.

The health education standards established by the Utah State Department of Education identify standards and objectives that each student should know after having engaged in each grade level. Standard 1 and its associated objectives state:
Standard 1: The Students will learn ways to improve mental health and mange stress
Objective 1: Develop strategies for appropriately and safely expressing emotion
Objective 2: Demonstrate acceptance of self and others
Objective 3: Develop assets that help promote resiliency
Objective 4: Demonstrate positive strategies for managing stress

This research study includes Recreation Therapy interventions aimed to assist each student in attaining this standard and its objectives. Recreation Therapy is a systematic process that incorporates the use of play, recreation, and leisure in efforts to increase overall well-being and quality of life. It is one way that is likely to help the students develop skills that create a healthy life.

STUDY PROCEDURE
As part of this study, the students will engage in an 8-week program. Each week, the students will meet with the researchers one time for 40 minutes. During week one and week eight, the researcher will administer a measurement that will identify the student's perception of his or her quality of life. A copy of this measurement is included in this information packet for you to review.

Each week, the students will meet with a licensed and certified Recreation Therapist. Each 40 minute session, the Recreation Therapist will teach skills based lesson plan that will meet the objectives identified in the Utah State Core Curriculum.

RISKS
The risks of this study are minimal. Your child may feel upset thinking about or talking about personal information related to well-being and quality of life. These risks are similar to those experiences when discussing personal information with others. If your child feels

upset from this experience, your child can tell the researchers and they will tell you about resources available to help.

BENEFITS
We cannot promise any direct benefit to your child for taking part in this study. However, possible benefits include:

- Increased quality of life
- Being able to identify and manage stress
- The development of skills that will support student in creating a healthy life.

ALTERNATIVE PROCEDURES
If you do not want your child to be in the study, there will be a space provided for them to go to do school related work.

CONFIDENTIALITY
We will keep all research records that identify your child private to the extent allowed by law. Records about your child will be kept on computers that are encrypted and protected with passwords. Only those who work with this study or are performing their job duties will be allowed to access your child's information.

However, if information is disclosed that gives study staff a reason to believe that a child has been subjected to abuse or neglect, study staff will report that information to Child Protective Services, or the nearest law enforcement agency to the extent required by law.

PERSON TO CONTACT
If you have questions, complaints, or concerns about this study, you can contact Jamie Bennett at 801-633-9254.

If you feel your child has been harmed as a result of participation, please contact the following organizations:

Institutional Review Board: Contact the Institutional Review Board (IRB) if you have questions regarding your rights as a research participant. Also, contact the IRB if you have questions, complaints or concerns which you do not feel you can discuss with the investigator. The University of Utah IRB may be reached by phone at (801) 581-3655 or by e-mail at irb@hsc.utah.edu.

Research Participant Advocate: You may also contact the Research Participant Advocate (RPA) by phone at (801) 581-3803 or by email at participant.advocate@hsc.utah.edu.

VOLUNTARY PARTICIPATION
Research studies include only people who choose to take part. You can tell us that you don't want your child to be in this study. Your child can start the study and then choose to stop the study later. This will not affect your relationship with the investigator or the school.

COSTS AND COMPENSATION TO PARTICIPANTS
There are no costs or compensation for involvement in this research study.

CONSENT

By signing this consent form, I confirm I have read the information in this parental permission form and have had the opportunity to ask questions. I will be given a signed copy of this parental permission form. I voluntarily agree to allow my child to take part in this study.

_____
Child's Name

_____
Parent/Guardian's Name

_____ _____
Parent/Guardian's Signature Date

_____
Relationship to Child

_____
Name of Person Obtaining Consent

_____ _____
Signature of Person Obtaining Consent Date

Parental Permission Document

BACKGROUND
Your child is being asked to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether you will allow your child to take part in this study. Please note that your child will be included in the study as part of the control group. Therefore, please understand that he or she will not be receiving the designed curriculum, he or she will solely be taking the 23 item measurement which is attached for your review.

The purpose of this study is to determine if Recreation Therapy interventions implemented within a school-based setting, focused the personal implementation of skills that create a healthy life, will result in an increased quality of life.

The health education standards established by the Utah State Department of Education identify standards and objectives that each student should know after having engaged in each grade level. Standard 1 and its associated objectives state:
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This research study has developed Recreation Therapy interventions aimed to assist each student in attaining this standard and its objectives. Recreation Therapy is a systematic process that incorporates the use of play, recreation, and leisure in efforts to increase overall well-being and quality of life. It is one way that is likely to help the students develop skills that create a healthy life.

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BENEFITS
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- Being able to identify and manage stress
- The development of skills that will support student in creating a healthy life.

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CONFIDENTIALITY
We will keep all research records that identify your child private to the extent allowed by law. Records about your child will be kept on computers that are encrypted and protected with passwords. Only those who work with this study or are performing their job duties will be allowed to access your child's information.

However, if information is disclosed that gives study staff a reason to believe that a child has been subjected to abuse or neglect, study staff will report that information to Child Protective Services, or the nearest law enforcement agency to the extent required by law.

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VOLUNTARY PARTICIPATION
Research studies include only people who choose to take part. You can tell us that you don't want your child to be in this study. Your child can start the study and then choose to stop the study later. This will not affect your relationship with the investigator or the school.

COSTS AND COMPENSATION TO PARTICIPANTS
There are no costs or compensation for involvement in this research study.

CONSENT
By signing this consent form, I confirm I have read the information in this parental permission form and have had the opportunity to ask questions. I will be given a signed

copy of this parental permission form. I voluntarily agree to allow my child to take part in this study.

_____
Child's Name

_____
Parent/Guardian's Name

_____ _____
Parent/Guardian's Signature Date

_____
Relationship to Child

_____
Name of Person Obtaining Consent

_____ _____
Signature of Person Obtaining Consent Date

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